

### **EXAMINER'S AMENDMENT**

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with attorney/agent Tom Thresh on March 18<sup>th</sup> 2009.

2. The application has been amended as follows:

#### **In the claims**

Claim 1, line 8, --with respect to the amount of carbon of the carbon nanotubes, -- has been inserted after "species".

Claim 1, line 11, "preferential" has been deleted.

Claim 1, line 12, --only-- has been inserted before "with metallic".

Claim 1, line 12, "over" has been changed to --but not with--.

Claim 2, line 8, --, with respect to the amount of carbon of the carbon nanotubes,-- has been inserted after "species".

Claim 2, line 11, "preferential" has been deleted.

Claim 2, line 11, --only-- has been inserted before "with metallic".

Claim 2, line 12, "over" has been changed to --but not with--.

Claim 3, line 8, --with respect to the amount of carbon of the carbon nanotubes-- has been inserted after "species".

Claim 3, line 10, "substoichometric" has been changed to --substoichiometric--

Claim 3, line 11, "preferential" has been deleted.

Claim 3, line 11, --only-- has been inserted before "with metallic".

Claim 3, line 12, "over" has been changed to --but not with--.

### **Reasons for Allowance**

This instant application is distinct from the prior art in record such as Bahr et al. (J. Am. Chem. Soc. 2001, 123, pp. 6536 - 6542) and Tour (WO02/060812) because instant application teaches using less than 1:1 mole ratio (substoichiometric amount) of diazonium salt with respect carbon amount of carbon nanotubes to selectively functionalize metallic and semimetallic carbon nanotubes but not semiconducting carbon nanotubes. While Bahr teaches a method for functionalizing carbon nanotubes wherein semiconducting carbon nanotubes are functionalized at the same time with metallic carbon nanotubes and no substoichiometric amount of diazonium species with respect to carbon amount of carbon nanotubes is used to achieve the selective fictionalization of metallic and semimetallic carbon nanotubes. In addition, Tour also expressly stated use oversaturated functionalizing diazonium salt to achieve fictionalization of carbon nanotubes including semiconducting carbon nanotubes. Therefore, the substiochiometric manipulation of diazonium salt and resulted selective

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fictionalization of metallic carbon nanotubes makes this instant application patentably distinct.

### **Citations**

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. All references are cited for related art. See PTO-892 Form prepared.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JUN LI whose telephone number is (571)270-5858. The examiner can normally be reached on Monday-Friday, 8:00am EST-5:00 pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Curtis Mayes can be reached on 571-272-1234. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/JUN LI/  
Examiner, Art Unit 1793

/J. L./  
03/18/2009

/Melvin Curtis Mayes/  
Supervisory Patent Examiner, Art Unit 1793